

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A display device comprising:

a pixel portion comprising a first thin film transistor ~~over a substrate~~; and

a switching regulator comprising:

a switching regulator control circuit comprising a second thin film transistor
~~formed over the substrate~~;

a switching element driven according to an output signal from said
switching regulator control circuit to raise or lower a voltage; and

a capacitor electrically connected to the switching element,

wherein the switching regulator control circuit is electrically connected to
the capacitor ~~for receiving the voltage charged in the capacitor~~

wherein the first thin film transistor and the second thin film transistor are
formed over a first substrate, and

wherein the switching element is packed over a second substrate.

2. (Currently Amended) A display device comprising:

a pixel portion comprising a first thin film transistor ~~over a substrate~~; and

a switching regulator comprising:

a switching regulator control circuit comprising a second thin film transistor
~~formed over the substrate~~;

a switching element ~~packed on the substrate~~, and driven according to an
output signal from said switching regulator control circuit to raise or lower a voltage; and

a capacitor electrically connected to the switching element,

wherein the switching regulator control circuit is electrically connected to the capacitor ~~for receiving the voltage charged in the capacitor,~~

wherein the first thin film transistor and the second thin film transistor are formed over a first substrate, and

wherein the switching element and the capacitor are packed over a second substrate.

3. (Currently Amended) A display device comprising:

a pixel portion comprising a first thin film transistor ~~over a substrate;~~ and

a switching regulator comprising:

a switching regulator control circuit comprising a second thin film transistor ~~formed over the substrate;~~

a switching element;

an inductor;

a diode; and

a smoothing capacitor electrically connected to the switching element,

wherein said switching regulator control circuit comprises:

a voltage feed back circuit electrically connected to the smoothing capacitor ~~for receiving a voltage charged in the smoothing capacitor;~~ and

a duty control circuit which controls a switching duty of said switching element, wherein the first thin film transistor and the second thin film transistor are formed over a first substrate, and

wherein the switching element is packed over a second substrate.

4. (Canceled)

5. (Currently Amended) A display device according to claim 3, wherein said inductor, said diode, and said smoothing capacitor are packed ~~[[on]]~~ over said second substrate.

6. (Original) A display device according to claim 3, wherein said switching element is made up of a thin film transistor.

7. (Currently Amended) A display device comprising:

a pixel portion comprising a first thin film transistor over a substrate; and

a switching regulator comprising:

a switching regulator control circuit comprising a second thin film transistor formed over the substrate;

a switching element driven according to an output signal from said switching regulator control circuit to raise or lower a voltage; and

a capacitor electrically connected to the switching element,

wherein the switching regulator control circuit is electrically connected to the capacitor ~~for receiving the voltage charged in the capacitor, and,~~

wherein the first thin film transistor and the second thin film transistor are formed over a first substrate,

wherein the switching element is packed over a second substrate, and

wherein said switching regulator control circuit uses an analog signal.

8. (Original) A display device according to claim 7, wherein said switching regulator control circuit comprises a reference voltage source, an error amplifier circuit, a triangle wave generation circuit, and a PWM comparator.

9. (Currently Amended) A display device comprising:

a pixel portion comprising a first thin film transistor over a substrate; and

a switching regulator comprising:

a switching regulator control circuit comprising a second thin film transistor formed over the substrate;

a switching element driven according to an output signal from said switching regulator control circuit to raise or lower a voltage; and

a capacitor electrically connected to the switching element,

wherein the switching regulator control circuit is electrically connected to the capacitor ~~for receiving the voltage charged in the capacitor, and,~~

wherein the first thin film transistor and the second thin film transistor are formed over a first substrate,

wherein the switching element is packed over a second substrate, and

wherein said switching regulator control circuit uses a digital signal.

10. (Original) A display device according to claim 9, wherein said switching regulator control circuit comprises an AD converter circuit, a nonvolatile memory, a CPU, and a pulse generation circuit.

11. (Previously Presented) A display device according to claim 1, wherein a plurality of switching regulator control circuits are formed over the substrate.

12. (Previously Presented) A display device according to claim 2, wherein a plurality of switching regulator control circuits are formed over the substrate.

13. (Previously Presented) A display device according to claim 3, wherein a plurality of switching regulator control circuits are formed over the substrate.

14. (Previously Presented) A display device according to claim 7, wherein a plurality of switching regulator control circuits are formed over the substrate.

15. (Previously Presented) A display device according to claim 9, wherein a plurality of switching regulator control circuits are formed over the substrate.

16. (Original) A display device according to claim 1, wherein said display device is a liquid crystal display device.

17. (Original) A display device according to claim 2, wherein said display device is a liquid crystal display device.

18. (Original) A display device according to claim 3, wherein said display device is a liquid crystal display device.

19. (Original) A display device according to claim 7, wherein said display device is a liquid crystal display device.

20. (Original) A display device according to claim 9, wherein said display device is a liquid crystal display device.

21. (Original) A display device according to claim 1, wherein said display device is an EL display device.

22. (Original) A display device according to claim 2, wherein said display device is an EL display device.

23. (Original) A display device according to claim 3, wherein said display device is an EL display device.

24. (Original) A display device according to claim 7, wherein said display device is an EL display device.

25. (Original) A display device according to claim 9, wherein said display device is an EL display device.

26. (Previously Presented) A display device according to claim 1, wherein the display device is applied to electronic equipment selected from the group consisting of a digital camera, a notebook type personal computer, a PDA, a DVD player, a folding portable display device, a watch type display device and a mobile telephone.

27. (Previously Presented) A display device according to claim 2, wherein the display device is applied to electronic equipment selected from the group consisting of a digital camera, a notebook type personal computer, a PDA, a DVD player, a folding portable display device, a watch type display device and a mobile telephone.

28. (Previously Presented) A display device according to claim 3, wherein the display device is applied to electronic equipment selected from the group consisting of a digital camera, a notebook type personal computer, a PDA, a DVD player, a folding portable display device, a watch type display device and a mobile telephone.

29. (Previously Presented) A display device according to claim 7, wherein the display device is applied to electronic equipment selected from the group consisting of a digital camera, a notebook type personal computer, a PDA, a DVD player, a folding portable display device, a watch type display device and a mobile telephone.

30. (Previously Presented) A display device according to claim 9, wherein the display device is applied to electronic equipment selected from the group consisting of a

digital camera, a notebook type personal computer, a PDA, a DVD player, a folding portable display device, a watch type display device and a mobile telephone.

31. (Currently Amended) A display device according to claim 1, wherein the ~~switching element and the capacitor are packed on a FPC~~ an FPC is used as the second substrate.

32. (Currently Amended) A display device according to claim 3, wherein the ~~switching element, the inductor, the diode, and the smoothing capacitor are packed on a FPC~~ an FPC is used as the second substrate.

33. (Currently Amended) A display device according to claim 7, wherein the ~~switching element and the capacitor are packed on a FPC~~ an FPC is used as the second substrate.

34. (Currently Amended) A display device according to claim 9, wherein the ~~switching element and the capacitor are packed on a FPC~~ an FPC is used as the second substrate.

35. (New) A display device according to claim 2, wherein an FPC is used as the second substrate.